

P006

Rickia wasmannii (Laboulbeniales) influences the water consumption of *Myrmica scabrinodis*

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Ant colonies are highly rewarding targets for parasites. Several fungi exploit ants, most of them are from the tropics, but some fungi are known from Europe. *Rickia wasmannii* (Ascomycetes: Laboulbeniales) is an ectoparasitic fungus living on different species of the ant genus *Myrmica* in Europe. In the Carpathian Basin (Central Europe), the most frequent host species is *Myrmica scabrinodis*. The thallus consists of a multiseriate receptacle which is only one layer of cells thick. The fungal thalli of the fungus penetrate the outer layer of the cuticle of ants, which could increase evaporation. Little is known about the effect of *R. wasmannii* on their hosts. We know that the infected ants die faster than the uninfected ones. In our research the water consumption of infected (240) and uninfected (240) *M. scabrinodis* workers were tested under laboratory conditions. The time one individual spent with water consumption after 12 hours thirsting was measured in 24 ant nests, collected from two regions. The analysis showed that infected ants spent significantly more time with consuming water than the uninfected ones which suggests that the ants have to replace the loss of water. These results support the possibility that the fungus absorbs water from the tissue, or it can cause increased evaporation through penetration of the cuticle with the haustoria. We found therefore new evidence that the fungus has a negative effect on the host ant. Supported by: the scholarship of Collegium Talentum; a 'Bolyai János' scholarship (MTA); the 'AntLab' Marie Curie CIG and TÁMOP-4.2.4.A/2-11/1-2012-0001 National Excellence Program.